ONLY THE BEST BECOME A **COMMODORE 64** BY D.K.MARSHALL ADAPTED BY DARRELL D. DIGITAL INTEGRATION

FIGHTER PILOT LOADING Hold down SHIFT and press RUN/STOP

FIGHTER PILOT is a real-time flight simulation based upon the F15 Eagle, USAF air-superiority jet fighter. This supreme simulation offers many of the features found on modern flight simulators including 3-D view from the cockpit, fully aerobatic performance, air-to-air combat, crosswinds, turbulence, and blind landing. The program offers training modes for each option and a pilot skill rating for varying difficulty levels.

OPTIONS

(1) Landing Practice - Your aircraft is positioned at an altitude of 1700 ft, 6 miles from touchdown at runway BASE. The undercarriage is lowered, ready for landing. Use the throttle, flaps and elevator controls to adjust your rate of descent and approach speed. Guidance may be taken from the Instrument Landing System (ILS) or the Flight Computer. Once you have landed, reduce the thrust to zero and apply the brakes.

(2) Flying Training - Your aircraft is positioned at the threshold of runway BASE, facing due North. Take off by opening the throttle, typically to 100% or full reheat, and pulling back on the joystick (or key 7) when you reach take-off speed. Maximum acceleration on take-off is achieved by applying the brakes until full thrust is reached. Raise the undercarriage shortly after take-off if you intend to exceed 300 kts. Take-off is possible at a lower speed with full flaps. Steer on the ground by using the rudder

controls, easiest if your speed is below 10 kts. (3) Air-to-Air Combat Practice - You are positioned 2 miles behind the enemy aircraft at the same altitude. Select Combat Mode and the Flight Computer to obtain a readout of enemy bearing, range and altitude. The enemy will be flying at 550 kts and will not return fire during the dogfight. Manoeuvre your aircraft when you see the enemy and open

fire as he passes through your sights. (4) Air-to-Air Combat - In this final option, you are responsible for defending the four airfields BASE, TANGO DELTA and ZULU. Your mission begins with a scramble from runway BASE. Use your radar and flight computer to

determine the location of the enemy aircraft, and after

assessing his likely target, fly your aircraft on an intercept

course. Visual contact will occur at less than 1 mile and less than 5000 feet altitude difference and the doglight begins with the enemy manoeuvring to gain advantage. Damage to your own aircraft is indicated by a colour change of the aircraft symbol on your radar. A fourth strike by the enemy is fatal! If you wish to break-off during the dogfight because of extensive damage or no ammunition left, the enemy will cease to attack once you are over 1 mile away or more than 5000 ft altitude difference. At this stage he will lock-on to his original ground target and pursue his ultimate objective of destroying all airfields. This will leave you free to return to any remaining runway for repairs, re-armament and refuell-

(5) Blind Landing - This option simulates landing and take-off in fog. No visual display is given whenever the aircraft is above 50 ft and the horizon is not displayed at any time. Navigate by using your radar, flight computer and map. Press key 5 to switch this option on or off.

(6) Crosswinds and turbulence - This option gives crosswind effects and random aircraft disturbances due to turbulence. Selection of this option will make flying and navigation more difficult and is recommended after a little

practice. Press key 6 to switch this option on or off. (7) Pilot rating - Skill levels increase from trainee to ace. This feature varies the skill of the enemy pilot during combat e.g. how soon he will detect your approach, the types of manoeuvres he can execute, how quickly he can get you into his sights, and how close you have to get to shoot him down. Your pilot rating does not affect the flight characteristics of your own aircraft. Beware, an ace enemy

pilot is very mean! CONTROLS

During flight, your aircraft is manoeuvred using the elevator. aileron and rudder controls. The ELEVATORS are operated using keys 7 and 8 (back and forward on a joystick) to pitch the aircraft up and down. The AILERONS are on keys 5 and 6 (left and right on a joystick) used to roll the aircraft left and right. Finally, the RUDDER control uses keys Z and X for left and right rudder. The rudder gives both a heading change and a roll change. During aerobatic manoeuvres. the effectiveness of the controls will vary. For example, at near 90 degrees roll, the elevator control will have a primary pitch nose-down when in a steep turn. Your pitch rate, roll rate and yaw (heading) rate will all increase in proportion to how long the control is applied. This feature gives a good approximation to the feel of a real aircraft.

The THROTTLE control uses keys Q and A: Q to increase engine THRUST, and A to decrease thrust. As well as affecting the aircraft speed, your pitch angle will vary when changing the thrust setting. The amount of thrust required to maintain a particular speed depends primarily on pitch angle and altitude. At low speeds, for example on the approach, the aircraft must adopt a nose-up attitude to maintain lift on the wings. This generates more drag and will require more thrust as a result. At higher speeds, this nose-up attitude is no longer necessary and the same thrust will maintain a higher speed. Your maximum speed will increase with altitude because of the decreasing air density.

The FLAPS are on keys W (up) and S (down) next to the throttle controls. The flaps are used to give a slower runway approach speed and a reduced rate of descent. The stall speed varies with flap setting, and operation of the flaps during flight will affect the pitch angle. Operation of the flaps at speeds above 472 kts will cause them to fail.

The UNDERCARRIAGE is raised and lowered using the key U. Lowering the undercarriage will have a small effect on aircraft speed. BRAKES remain on whenever the key B is pressed, indicated by the panel BRAKES light. The

brakes do not function when airborne. The GUNS are fired by pressing space bar after selecting COMBAT mode with key C. The ammunition status is shown at the bottom right hand corner of the instrument panel. The 3 lightning symbols above the ammo indicate that enemy aircraft are present. The number of enemy

aircraft destroyed is to the right of these. take a little practice - particularly air-to-air combat!

One final point... flying a fighter aircraft is not easy and will

effect on heading, not pitch. The aircraft will also tend to